WHAT IS CLAIMED IS:

1. A voltage control oscillating apparatus capable of adjusting a frequency of an output oscillating signal of the voltage control oscillating apparatus, comprising:

a plurality of serial-coupled voltage control delay lines (VCDL) for outputting a plurality of oscillating signals respectively according to a voltage control signal, each of the oscillating signals is corresponding to an oscillating frequency;

a multiplexer coupled to the VCDL for selecting one of the oscillating signals to be the output oscillating signal according to a control signal;

a frequency detector coupled to the multiplexer for outputting a detecting signal according to the output oscillating signal; and

a controller coupled to the frequency detector for outputting the control signal to the multiplexer according to the detecting signal.

2. The voltage control oscillating apparatus of claim 1, wherein each of the voltage control delay lines includes a control terminal for receiving the voltage control signal, an input terminal coupled to the previous voltage control delay line, and an output terminal coupled to the next voltage control delay line and the multiplexer for outputting the corresponding oscillating signal.

3. A method for used in a voltage control oscillating apparatus for adjusting a frequency of an output oscillating signal, the method comprising the steps of:

detecting the frequency of the output oscillating signal; and

selecting one of a plurality of oscillating signals as the output oscillating signal according to the result of the detection, wherein each of the oscillating signals is corresponding to an oscillating frequency.

4. The method of claim 3, wherein the method further comprises generating a control signal according to the result of the detection for selecting one of the oscillating signals.